REMARKS/ARGUMENTS

Favorable reconsideration of this application, in light of the following discussion, is respectfully requested.

Claims 1-19 are pending in this case; Claims 1-3, 5-9, and 12-19 have been amended to correct minor informalities and to place the claims in conformance with U.S. practice. No new matter is added.

In the outstanding Official Action, Claims 1-4, 7, and 16(1-4), and 16(7) were rejected under 35 U.S.C. § 102(e) as being anticipated by Pastor [1] (U.S. Pat. No. 6,445, 801, hereinafter Pastor [1]). Claims 9, 14, and 16(9), and 16(14) were rejected under 35 U.S.C. § 103(a) as being unpatentable over Pastor [1] in view of Erell (U.S. Pat. No. 5,778,342, hereinafter Erell). Claims 11-13 and 16(11-13) were rejected under 35 U.S.C. § 103(a) as being unpatentable over Pastor [1] in view of Erell, and in further view of Bialik (U.S. Pat. No. 5,673,364, hereinafter Bialik). Claim 17 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Pastor [1] in view of Erell, and in further view of Pastor (U.S. Pat. No. 6,438,513, hereinafter Pastor [2]). Claims 15, 16(15) and 19 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Pastor [1] in view of Gulli U.S. Pat. No. 6,128,594, hereinafter Gulli. Claims 5, 6, 8, 10, 16(5), 16(6), 16(8), 16(10), 18(16/5), 18(16/6), 18(16/8), 18(16/10), 19(16/5), 19(16/6), 19(16/8), and 19(16/10) were objected to as being dependent upon a rejected base claim, but were otherwise indicated as being allowable if rewritten in independent form.

Applicants appreciatively acknowledge the indication of allowable subject matter. However, Applicants consider that independent Claim 1 presents features that patentably defined over the applied prior art for the reasons set forth below.

Applicants respectfully submit that Claims 1 and 16 include novel features not taught or suggested by the prior art of record. One such feature described in Claim 1 (with similar

structure in Claim 16) is the recital of a "shape-recognition step, in which the vectors of parameters are assessed with respect to references pre-recorded in a reference space during a preliminary learning step, so as to obtain recognition by the determining of at least one reference which is close to the vector of parameter" (emphasis added). The outstanding rejection relies on Pastor [1] as teaching the "shape-recognition step."[1] However, Pastor [1] describes a noise-ridden signal U(n) that is applied to a Wiener filter W(z), the output of which is a signal with the noise component suppressed S(n). In fact, at no point does Pastor [1] allude to shape recognition, a reference space, a learning step or a comparison of an input acoustic signal to a reference which is stored in the reference space, all features found in independent Claims 1 and 16.

A second exemplary feature of Claim 1 that patentably defines over the prior art relied upon is the "updating of the reference space as a function of the new noise model." The invention performs automatic and reiterative searching of successive frames to detect a noise transition to permit the update of the reference space.[2] Similar features also are apparent in Claim 16.

Pastor [1] discloses that the frequency at which ambient noise is measured can be adjusted so that updates occur more frequently in a noisy environment. Specifically, Pastor [1] describes that "some seconds" may separate one ambient noise detection session from another session, and provides examples of such implementations wherein regardless of the noise level the ambient noise detections in his device are not successive.[3] In the present invention, a new model is constantly calculated, but not used to update the reference space

[1] Pastor [1] Figures 1 and 2.
[2] Application at page 11, lines 9-28.
[3] Pastor [1] at column 13, lines 18-39.

without a corresponding noise transtition.[4] In Pastor [1], the new noise model is periodically calculated and no reference space is present for update.

In addressing Claim 9, the rejection combines the Pastor [1] and Erell references to provide support for the "reference space" limitation in Claim 1. This is itself evidence that the Claim 1 subject matter is not taught by Pastor [1] alone. Furthermore, the proposed combination is improper because Erell teaches a voice pattern recognition system which stores sound samples in a reference template storage area so that speech input through the speech input device can be compared to the voice samples in the reference area. Pastor [1] teaches a method of suppressing a noise component of a voice signal and at no point alludes to having the ability to detect specific patterns of speech. There is no motivation, or suggestion of any reason to combine teachings from these separate references to be found in either Pastor [1] or Erell. Thus, it would not have been obvious to one of ordinary skill in the art at the time of the invention, absent hindsight, to combine these two references. Note: *In re Lee*, 61 USPQ2d 1430, 1434 (Fed. Cir. 2002).

Furthermore, on pages 7 and 8, the rejection states that "It would have been obvious... to modify the method of determining the vectors of parameters in the learning or training phase as shown by Pastor [1] to include the use of reference space as taught by Erell..." However, at no point in Pastor [1]'s reference is any "training or learning" step disclosed.

Therefore, even if these references are combined, the combined teachings of the references are not believed to render obvious the structure of the Applicant's invention as recited in Claims 1, 9, 14, and 16. In light of the above discussion, regarding Claims 11-13, Bialik does not cure the deficiencies of Pastor [1] and Erell. Regarding Claim 17, Pastor [2]

[4] Application at page 11, lines 21-28.

does not cure the deficiencies of Pastor [1] and Erell. And Gulli fails to cure the deficiencies of Pastor [1] regarding the rejection of Claims 15, 16(5), and 19.

Consequently, in view of the present amendment and in light of the foregoing comments, it is respectfully submitted that the invention defined by Claims 1 and 16 is patentably distinguishing over the prior art. The present application is therefore believed to be in condition for formal allowance and an early and favorable reconsideration of this application is therefore requested.

Respectfully submitted,

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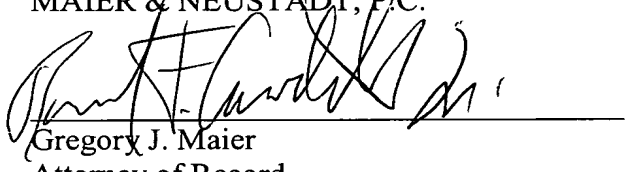

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